

Clear Creek, Nebraska, 25th.
 Vineland, New Jersey, 25th.
 Wytheville, Virginia, 17th, 19th, 20th.
 Charleston, South Carolina, 25th.
 Punta Rassa, Florida, 24th.
 Memphis, Tennessee, 24th.
 Los Angeles, California, 5th.
 Cape Mendocino, California, 4th, 20th, 24th, 31st.
 Woodstock, Vermont, 1st, 11th.

ZODIACAL LIGHT.

Cambridge, Massachusetts, 2d, 3d, 6th, 8th, 27th, 29th.
 Northport, Michigan, 15th.
 Wauseon, Ohio, 5th, 7th, 12th, 26th.
 Cape Lookout, North Carolina, 3d.
 Punta Rassa, Florida, 2d, 3d, 4th.
 Pensacola, Florida, 23d.
 Vicksburg, Mississippi, 29th.
 Palestine, Texas, 2d, 5th, 6th, 23d.
 Little Rock, Arkansas, 6th.
 Nashville, Tennessee, 1st, 2d, 3d, 5th, 7th, 8th, 24th to 28th.
 Prescott, Arizona, 1st to 8th, 24th to 31st.

PRAIRIE AND FOREST FIRES.

Marshfield, Plymouth county, Massachusetts, 1st.—A disastrous fire occurred on the Marshfield plains. It is estimated that three thousand acres of woodland were burned over.

Concord, New Hampshire, 18th.—A disastrous fire occurred in "dark plains", east of this city, at noon. The flames swept over about five hundred acres of land, a large part of which was covered by a heavy growth of valuable timber, and about five hundred cords of wood. The damage is estimated at \$5,000.

Woodville, Grafton county, New Hampshire, 18th.—Forest fires have burned over 1,000 acres of land in this vicinity. In Hall's woods, seven miles from this place, the fires burned over an area of 2,000 acres and destroyed 4,000 cords of wood. At Barnstable a large tract of woodland was burned over, and

much cord-wood was destroyed. The fires also raged on Blue Terry mountains and on Mount Webster.

Lancaster, Coos county, New Hampshire.—A fire originated in the woods on Cherry mountain during the 19th, and spread over a large area, destroying timber valued at \$10,000. A saw mill together with a large quantity of logs, lumber, and cord-wood were also burned.

Montpelier, Vermont.—The most disastrous forest fire that ever occurred in this state, originated in the vicinity of Groton, Caledonia county, on the 19th. An extensive area was burned over and a large amount of property destroyed. The loss is estimated at \$150,000.

Less extensive prairie and forest fires occurred as follows:

Alexandria, Dakota, 10th, 21st.
 Yankton, Dakota, 7th, 16th, 22d, 24th, 28th, 30th.
 Fort Stevenson, Dakota, 3d, 15th.
 Milton, Massachusetts, 13th.
 Somerset, Massachusetts, 18th, 19th.
 Williamstown, Massachusetts, 1st.
 Indianola, Texas, 13th, 21st, 22d, 27th.
 Saint Vincent, Minnesota, 16th.
 Fort Bayard, New Mexico, 6th, 26th, 27th, 28th.
 Mount Washington, New Hampshire, fires in northwest, 18th, 19th.
 North Platte, Nebraska, 9th.
 Moorhead, Minnesota, 16th.

MIGRATION OF BIRDS.

Geese flying northward.—Alexandria, Dakota, 1st; Bismarck, Dakota, 6th; Clear Creek, Nebraska, 20th; Albany, Oregon, 8th; Grand Haven, Michigan, 3d, 5th; Roseburg, Oregon, 3d.
Flying southward.—Yuma, Arizona, 29th. *Flying west.*—Yuma, Arizona, 23d.

Ducks flying northward.—Clear Creek, Nebraska, 20th.

NOTES AND EXTRACTS.

The following summary is taken from the May report of the "Illinois Meteorological Service."

Summary of meteorological observations for the month of May, 1883, made to the Illinois Department of Agriculture, Springfield, June 1, 1883. Hours for taking observations: 7 a. m., 2 p. m., 9 p. m.

Stations.		Elevation above sea—feet.	Thermometer.						Barometer.						Wind.		Rain.		No. of days on which cloudiness averaged 0.8 or more.	Mean humidity.
County.	Post office.		Highest.	Lowest.	Mean.	Range of.	Highest daily mean.	Lowest daily mean.	Highest.	Lowest.	Mean.	Range of.	Highest daily mean.	Lowest daily mean.	Prevailing direction.	Max. velocity or force in miles per hour.	No. of days on which rain or snow fell.	Total rainfall.		
Northern division.																				
Cook	Chicago	657	80.10	35.90	52.10	44.20	70.40	38.10	30.290	29.484	29.624	0.806	30.177	29.573	N.	5	18	7.32	69.3	
Kane	Aurora	676	85.00	34.00	56.10	51.00	72.06	39.33	30.260	29.470	29.890	0.790	30.160	29.560	N.W.	5	18	7.23	77.0	
McHenry	Marengo	925	81.00	30.00	52.40	51.00	72.00	37.00							N.W.	7	15	6.18	13	
Ogle	Polo		81.00	29.00	52.45	52.00	70.00	35.00							N.W.		16	6.14	14	
Peoria	Peoria	460	87.00	35.00	60.70	52.00			29.894	29.068	29.543	0.796			N.	5	15	6.54	5	
Warren	Monmouth	700	86.00	34.00	59.76	52.00	73.00	48.00	29.700	28.890	29.377	0.810			N.W.	4	14	5.32	68.0	
Whiteside	Morrison	970	82.00	32.00	55.82	50.00									N.W.	0	15	4.78	10	
Stark	Elmira		83.00	36.00	54.98	47.00											11	4.31		
De Kalb	Sycamore	800	80.20	34.00	53.13	46.20	74.30	38.00							N.W.	6	15	8.55	18	
Lee	Prudenville	725	80.00	30.00	57.80	44.00	75.10	45.20	30.150	29.360	29.810	0.790	30.081	29.440	N.	5	13	7.01	74.5	
Central division.																				
Christian	Pana	760	85.00	40.00	62.50	45.00	70.50	48.00							N.W., S.W.	5	8	4.31	20	
Coles	Mattoon	724	86.00	32.00	61.00	54.00	75.00	49.50							N.		14	4.15	8	
Logan	Atlanta	510	88.00	29.00	57.10	59.00	74.00	38.00							S.W.		14	5.59	7	
Pike	Griggsville	625	88.00	31.00	58.00	57.00	75.00	38.00	30.45	29.030	30.010	0.820	30.340	29.700	S.W., N.W.	5	13	6.60	12	
Sangamon	Springfield	640	87.00	33.90	50.10	53.10	72.50	40.80	30.301	29.500	29.936	0.801	30.236	29.606	S.	5	16	6.60	65.2	
Southern division.																				
Alexander	Cairo	377	83.50	38.00	65.20	45.50	76.80	43.80	30.349	29.677	30.013	0.672	30.286	29.745	S.W.	6	12	3.85	66.4	
Bond	Greenville		91.00	34.00	63.40	57.00	80.30	42.00							N.		9	6.25	18	
Crawford	Palatine		86.00	38.00	58.51	48.00	76.25	41.25							N.	5	10	2.09	8	
Hamilton	McLeansboro		86.00	35.00	63.00	51.00	76.70	41.20							S.W.		12	5.20	10	
Pope	Goldsboro		84.00	40.00	68.00	44.00	75.50	41.25							N.W.	6	12	7.13	9	
Saint Clair	Mascoutah		84.00	31.00														6.20		
Union	Anna	625	85.00	32.00	64.74	53.00			30.250	29.680	30.010	0.570			N.W., N.E., S.W.	4	10	6.64	9	

Dr. Gustavus Hinrichs, director of the "Iowa Weather Service," has forwarded the following advance proof of his report for May, 1883:

May, 1883, was remarkably cold, very rainy, with late frosts, westerly and northerly winds prevailing.

The mean temperature of the air was nearly five degrees below normal; in forty-five years May has been six times as cold or colder than this year,

namely, in 1882, 1867, 1858, 1851, 1850, and 1849. The late frosts about the 12th and 22d were general.

The rainfall was much above normal throughout Iowa, except in middle northern Iowa and down the middle Cedar and Wapsipicon valleys. The total rainfall was highest along the Mississippi and Missouri rivers, and from Wayne to Polk county; in the regions here specified the rainfall averaged seven inches.

The rain frequency was also high; two of every three days were rainy in most parts of the state.

The principal storm days were the 8th and 9th, the 13th and 14th, 17th and 27th. On the 9th a very small tornado did slight damage in Linn county, near Norway Station; on the other storm days Iowa was spared the visitation of tornadoes, which struck on the 13th Kansas City; 18th, Racine; 28th, southern Indiana.

While unusually cold and quite wet, the season is much more promising than last year, when May was much colder.

The following summary has been forwarded by Mr. S. R. Thompson, director of the "Nebraska Weather Service:"

The month was colder than usual with much rain.

Rainfall.—The average was by sections as follows: Southeast, 5.79 inches, northeast, 6.72; southwest, 5.98; northwest, 5.01. Average for entire state, 5.88.

Temperature.—The mean temperature of the air was 59°.60. The average of all noon observations was 63°.63.

The following are some of the maximum and minimum temperatures: Omaha, maximum, 87°.2; minimum, 39°.0; North Platte, maximum, 87°.3; minimum, 31°.0; De Soto, maximum, 93°.0; minimum, 39°.0; Agricultural

College, maximum, 88°.0; minimum, 35°.0; Peru, maximum, 82°.87; minimum, 43°.25.

Mean relative humidity.—Omaha, 68.4; North Platte, 70.0; De Soto, 73.8; Agricultural College, 72.84.

Wind.—Number of miles travelled: Omaha, 6,626; North Platte, 9,498; mean direction, Omaha, north; North Platte, west. Greatest velocity at Omaha, 36 miles, southwest; at North Platte, 40 miles, east.

Miscellaneous.—Light frost on the 22d, at Inavale, Nebraska City, Table Rock, Genoa, Peru, and Central City.

A hail storm at Red Cloud and vicinity did considerable damage to crops. Corn planting commenced on the 1st at Beaver Creek.

At Red Willow the thermometer fell from 88° to 60° in two hours.

J. H. Hunt, Superior, writes that on the 26th they had a hail storm lasting ten minutes. Hail fell as large as hickory-nuts and covered the ground two inches deep, giving the appearance of midwinter. Trees were almost denuded of leaves, and fruit and crops were destroyed. The hail had not yet all melted at 9 a. m. on the 27th. Observers report that corn has been planted earlier than usual and that much had to be replanted.

To observers.—Although as a rule the reports come in good time, some are invariably behind-hand. All reports should be here by the 6th, as the report is not available at Washington for the monthly bulletin, unless it reaches there before the 12th of the month. Hoping that you will consider the necessity of having the report out early.

I am yours, respectfully,

S. R. THOMPSON, Director.

Professor Mendenhall, of the "Ohio Weather Service," furnishes the following meteorological summary for May, 1883:

Report of the Ohio meteorological bureau. Summary for the month of May, 1883.

Numbers.	Stations.	Counties.	Mean barometer.	Highest barometer.	Day of month.	Lowest barometer.	Day of month.	Range of barometer.	Mean relative humidity.	Mean temperature.	Highest temperature.	Day of month.	Lowest temperature.	Day of month.	Range of temperature.	Mean daily range of temperature.	Greatest daily range of temperature.	Day of month.	Least daily range of temperature.	Day of month.	Number of clear days.	Number of fair days.	Number of cloudy days.	Days on which rain or snow fell.	Total rainfall for month.	Average daily rainfall.	Direction of wind.
1	Cincinnati.....	Hamilton.....	29.976	30.336	6	29.548	20	.788	63.7	62.6	65.0	22	58.0	22	7.0	17.2	29.0	7	7.0	29	10	12	9	16	5.49	.177	nw.
2	Dayton.....	Montgomery.....	29.987	30.381	6	29.521	14	.857	69.0	68.1	70.0	12	58.0	12	3.0	21.3	32.2	7	9.0	23	10	12	13	5.09	.164	s.	
3	Lima.....	Allen.....	30.006	30.329	5	26.574	14	.755	78.0	78.0	80.0	12	58.0	12	2.0	28.4	47.5	7	7.0	22	10	13	13	6.13	.198	sw.	
4	Sidney.....	Shelby.....							66.0	66.0	68.0	13	58.0	13	2.0	29.7	44.0	9	11.0	20	10	13	14	6.58	.179	w.	
5	Up'r Sandusky.....	Wyandot.....	29.975	30.360	6	29.609	14	.751	66.0	66.0	68.0	13	58.0	13	2.0	23.0	37.0	24	7.0	22	10	13	14	6.58	.179	sw.	
6	Wauseon.....	Fulton.....	29.920	30.200	6	29.540	14	.720	71.0	71.0	73.0	13	58.0	13	2.0	21.3	40.9	7	10.0	29	10	13	14	6.58	.179	sw.	
7	Lebanon.....	Warren.....							74.0	74.0	76.0	13	58.0	13	2.0	21.3	39.1	9	10.0	29	10	13	14	6.58	.179	sw.	
8	N. Lewisburg.....	Champaign.....							68.0	68.0	70.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
9	Levering.....	Knox.....							73.0	73.0	75.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
10	Gambier.....	Knox.....	29.946	30.309	6	29.481	21	.828	70.0	70.0	72.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
11	Toledo.....	Lucas.....	29.913	30.266	6	29.524	14	.742	64.9	64.9	66.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
12	Ironton.....	Lawrence.....	29.994	30.319	6	29.559	20	.700	69.0	69.0	71.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
13	Washington.....	Fayette.....							69.0	69.0	71.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
14	Waverly.....	Pike.....							73.0	73.0	75.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
15	Columbus.....	Franklin.....	29.941	30.278	6	29.469	21	.809	62.2	62.2	64.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
16	O. S. University.....	Franklin.....							61.0	61.0	63.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
17	Westerville.....	Franklin.....	29.960	30.326	6	29.530	21	.795	78.0	78.0	80.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
18	Oberlin.....	Lorain.....	29.989	30.324	6	29.612	21	.712	77.0	77.0	79.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
19	Marietta.....	Washington.....	29.945	30.325	6	29.390	21	.935	73.0	73.0	75.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
20	Granville.....	Licking.....							70.0	70.0	72.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
21	Quaker City.....	Guernsey.....							73.0	73.0	75.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
22	Canton.....	Stark.....	29.994	30.321	17	29.491	21	.830	70.0	70.0	72.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
23	Warren.....	Trumbull.....							72.0	72.0	74.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
24	Wooster.....	Wayne.....	30.017	30.329	6	29.567	21	.762	71.0	71.0	73.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
25	Cleveland.....	Cuyahoga.....	29.929	30.280	6	29.467	14	.813	64.8	64.8	66.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
26	Cleveland.....	Cuyahoga.....							54.7	54.7	56.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	10	13	14	6.58	.179	sw.	
27	State.....		29.964	30.381	6	29.390	21	.991	70.4	68.0	70.0	13	58.0	13	2.0	21.3	34.0	9	10.0	29	7.7	12.7	10.6	14.1	6.81	.184	sw.

NOTE.—The means are computed only from station reports covering the entire month, and whose instruments have been compared with standards.

The "Missouri Weather Service," under direction of Professor Francis E. Nipher, has issued the following report:

The average temperature for May at the central station has been 63°.4, which is 2°.8 below the normal temperature and 3°.5 above the temperature of May, 1882. Since 1837 the May temperature has fallen below that of last month five times. The extremes during last month at the central station were 38°.0 and 88°.4, although in the suburbs of Saint Louis the temperature fell to 36°.0 on the evening of the 21st. In 1851 Dr. Englemann observed a temperature of 29°.0 in May, but it was in the early part of the month.

In the state the lowest minimum temperatures reported were: 29°.5 at Centerville; 31°.0 at Big Creek, Warren county; 32.0 at Steelville; all other stations reporting over 34°.0. The highest minimum temperatures are reported from Glasgow, 45°.0 and Harrisonville, 47°.0. The highest maximum temperatures reported were: Corring, 91°.0; Miami, 98°.0; Harrisonville and Big Creek, 90°.0. The highest average temperature reported were: Cairo, Ills., 65°.2; Mascoutah, Ills., 65°.0; Harrisonville, 64°.0; the lowest being, at Keokuk, Ia., 59°.9; Macon, 60°.4; Louisiana, 60°.5.

The rainfall at the central station was 2.61, which is 2.2 inches below the normal May rainfall at Saint Louis. In western Missouri, however, from Harrisonville northward along the Missouri valley, the rainfall has been over seven inches, and a small maximum of over seven inches occurs in the region around Ironton. An area of minimum rainfall of between two and three

inches occurs in southwest Missouri, around Greenfield and Lamar, and another occurs along the lower Missouri below Chamois, extending along the Mississippi as far south as Cairo.

On the 13th, tornadoes occurred at various points in Missouri and Kansas, as follows: The town of Oronogo, Jasper county, was destroyed at about 7.40 p. m., two persons being killed and forty injured. This tornado is probably the one which passed about two miles north of Carthage. Hailstones as large as hens' eggs fell at Springfield at about 10 p. m.

Another storm passed two miles southeast of Pattonville, Davies county, on the same evening.

Two tornadoes passed through Kansas City at 5 o'clock, one passing a few minutes later than the other. Several persons were killed and a great deal of damage was done to property. These whirls were slender, whip-like vortices, the diameter at the surface of the earth being only a few feet, although the destructive path was about seventy feet. These storms originated apparently in Wyandotte county, Kansas, where they caused great damage. A later development of this storm passed through Macon City, one hundred and twenty miles east-northeast from Kansas City, where a tornado occurred about 8.30 p. m. The track was from one-fourth to three-eighths of a mile wide. Three persons were killed at Macon.

On the 18th, tornadoes occurred in Missouri, Illinois, and Wisconsin as follows: at 7 p. m. a tornado did considerable damage at Berger, Gasconade county, Missouri.

At about 8.20 p. m. a tornado passed through Wentzville from the south

west, causing great destruction of property and loss of life as far as Saint Paul, Missouri.

At about the same time a storm passed from Cottleville, through Elm Point, to Grafton, on the Illinois shore of the Mississippi river.

In Illinois tornadoes occurred as follows: At Edwardsville a destructive tornado occurred about 11 o'clock p. m. This tornado passed over Saint Louis shortly after 10 o'clock, manifesting itself as a severe puff of wind.

A tornado passed four miles southeast of Staunton, Macoupin county, at 9 o'clock p. m. Its track was seven miles long and two hundred yards wide.

At Shipman, Macoupin county, between 8 and 9 o'clock p. m., a tornado did great damage, and a parallel track was traversed by another in the same county, passing through Plainview at 9 o'clock.

At 6 o'clock p. m. a tornado struck the earth two miles east of Whitehall, Greene county, sweeping south of Murryville into Morgan county.

At 8 o'clock p. m. a tornado destroyed Litterberry, Morgan county.

About 9.40 p. m. a tornado passed near Hillsboro, Montgomery county, causing great destruction. This tornado reached Nokomis after 10 o'clock, passing about four miles north of Pana, Shelby county. This was probably the same whirl which visited Pesotum, Champaign county, at 11.30 p. m., where the whirl was clearly defined and great damage done. It is said that four inches of rain fell here. Mount Pulaski, Logan county, was visited by a tornado on the same evening, the track passing near Kenny through the southern part of De Witt county.

A destructive tornado also passed near Rockford, Winnebago county, but the hour of occurrence is not given. This may have been the same tornado which passed through Racine, Wisconsin, at 7 o'clock, causing great damage and killing nine or ten persons.

In Illinois about sixty lives were lost in these tornadoes.

Hail-storms have occurred as follows: At Big Creek, 10th; Centreville, 9th; eight miles north of Savannah, 3d; Hannibal, 9th; Louisiana, 9th and 10th; and at Springfield and Dover church, near Louisiana, large hail fell on the afternoon of the 18th; Lamar, 3d; Chamois, 9th—a violent storm of wind and hail at 7 p. m. for seven or ten minutes, the hail completely covering the ground, some stones weighing six ounces—on the 18th, at 5.50 p. m., a dark cloud in the southwest moved to the west with a heavy roaring noise,

appearing to spend its force when due west, rain and small hail following.

Killing frosts occurred on the nights of the 21st and 22d as follows: At Big Creek, great damage to wheat, corn, and fruit. At Centreville, at 9 p. m., on the 21st the temperature was 32° and fell later to 29°—the latest frost in sixteen years. Fog prevented damage in the valleys of the Black river, but in the dry valleys everything was killed. Louisiana, 32° at sunrise on the 22d. Chamois, destructive frost with ice an eighth of an inch thick in a pan of water. Greenfield, heavy frost which injured foliage of forest trees so that they looked as though scorched by fire.

White frosts occurred as follows: Hannibal, Greenfield, Mexico, Chamois, 5th; Hannibal, Louisiana, Chamois, Miami, 11th; Ironton, 16th; over the entire state, 21st and 22d, but light in the southwest, where the temperature was about 40°; Mexico, Ironton (33° at 5.30 a. m.), Louisiana, Chamois, Miami, Greenfield, 23d; Sedalia, Centreville, Greenfield (heavy), Ironton, Chamois, Miami, 31st.

The following meteorological summary and table are taken from the May report of the "Tennessee Weather Service":

Mean temperature, 64.5.

Highest temperature, 92°, on the 8th at Murfreesboro'.

Lowest temperature, 33°, on the 22d at Grand View.

Range of temperature 59°.

Mean daily range of temperature, 19°.66.

Greatest daily range of temperature, 40° on the 7th at Andersonville and Florence Station.

Least daily range of temperature 1°, on the 27th at Fostoria.

Mean depth of rain or melted snow, 3.87 inches.

Greatest depth of rain or melted snow, 11.9 inches at White Bluff.

Least depth of rain or melted snow, .81 inches at McMinnville.

Average number of clear days, 12.

Average number of fair days, 7.

Average number of cloudy days, 12.

Average number of days on which rain or snow fell, 7.

Prevailing direction of the wind, Southwest.

Abstract of meteorological observations for the month of May, 1883, as reported to the Bureau of Agriculture, &c., of Tennessee, by voluntary observers in co-operation with General W. B. Hazen, Chief Signal Officer, U. S. A.

County.	Station.	Latitude north.	Longitude west of Washington.	Temperature.					Wind.	Number of days—											On which rain fell, including hail, snow, and sleet.	Total rainfall, including hail, snow, and sleet (in inches).	Observers.				
				Mean of 7 a. m.	Mean of 2 p. m.	Mean of 9 p. m.	Average monthly.	Highest.		Prevailing direction.	Greatest force. Scale 0 to 10.	Date.	Clear.	Fair.	Cloudy.	Aurora.	Dew.	Fog.	Frost.	Lunar halos.				Solar halos.	Hail-storms.	Thunder-storms.	
Anderson	Andersonville	36 20	80 58	61	65	66	66	86	se.	h.	14	16	3	12	.....	.....	3	1	2	1	.....	.....	.....	8	1.19	J. K. P. Wallace.
Bedford	Flat Creek	35 30	9 40	71	64	64	64	82	sw.	h.	14	7	15	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	3.79	William Hart.
Blount	Maryville	35 45	7 06	57	75	63	65	86	w.	h.	15	11	8	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	3.43	W. H. Henry.
Bradley	Grief	35 11	7 42	56	70	61	63	86	n.	br.	15	6	11	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	2.22	J. T. Cowden.
Campbell	Caryville	35 00	7 30	55	72	61	61	84	w.	h.	16	11	4	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	2.27	Fletcher Smith.
Carroll	Huntingdon	36 00	11 26	55	72	61	65	84	n. sw.	h. 4.	9	11	8	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4.20	A. W. Hawkins.
Carroll	Huntingdon	36 05	11 23	57	76	65	66	85	sw.	h.	18	14	2	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	3.80	J. S. Ramsey.
Carroll	McKenzie	36 10	11 30	56	73	65	66	85	n.	br.	18	14	9	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	6.10	John Brown.
Cheatham	Kingston Springs	36 10	10 44	58	68	63	64	78	n. w.	br.	21	11	9	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	4.57	W. J. Inman.
Coffee	Manchester	35 20	9 04	61	73	59	64	84	sw.	br.	15	8	10	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	3.05	Wiley Hickerson.
Coffee	Beech Grove	35 30	8 06	57	74	66	66	86	sw.	br.	16	4	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	3.70	B. F. Cheatham.
Cumberland	Grassy Cove	36 00	8 00	54	68	55	59	82	n.	br.	18	21	3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	3.62	Nettie M. Stratton.
Crockett	Gadsden	35 45	12 00	60	71	66	66	84	sw.	h.	15	8	13	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	5.40	M. T. Moore.
DeKalb	Smithville	35 50	8 40	60	71	66	66	84	sw.	h. 4.	20	7	11	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	4.05	P. C. Bluhm.
Dickson	White Bluff	36 00	10 00	59	70	59	63	84	n.	br.	16	6	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	11.09	Prof. McMillan.
Dyer	Dyersburg	36 15	12 20	56	71	61	64	82	n.	br.	21	16	4	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	3.26	L. Hughes.
Gibson	Milan, 440 ft.	35 55	11 47	58	70	63	64	87	n.	h. 4.	28	16	5	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	4.79	M. D. L. Jordan.
Gibson	Trenton	35 58	11 58	59	70	63	64	82	sw.	h.	21	8	6	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	A. S. Currey, (26 d's).
Giles	Pulaski	35 15	10 00	60	71	64	65	85	n.	br.	15	16	4	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	2.51	Prof. W. T. Mann.
Greene	Greeneville	36 42	7 48	59	73	66	66	84	w.	h.	15	16	4	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1.02	E. Link.
Hawkins	Rogersville	36 22	6 00	58	71	60	63	84	sw.	br.	21	11	9	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	1.98	S. V. McCorkle.
Hardenman	Bolivar	35 18	12 00	58	71	64	64	84	n.	br.	20	18	8	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4.54	E. P. McNeal.
Hardin	Savannah	35 20	11 40	60	73	65	66	84	sw.	h.	20	17	9	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4.78	H. R. Hinkle.
Haywood	Brownsville	35 36	12 20	55	73	62	63	88	sw.	.....	.....	15	4	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	5.71	Daniel Bond.
Henry	Paris	36 33	11 25	63	66	64	66	77	w.	br.	19	17	5	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	4.34	J. J. Travis.
Humphreys	Waverly	36 00	10 45	56	71	70	65	81	sw.	br.	12	8	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	5.04	D. R. Owen.
Knox	Knoxville	.....	.....	57	70	52	59	86	sw.	br.	18	9	10	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	2.74	Prof. J. W. Glenn.
Lewis	Hohenwald	35 30	10 30	60	74	62	65	85	sw.	br.	18	9	5	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5.59	A. P. Grover.
Lincoln	Howell	35 15	9 30	60	74	62	65	85	n.	br.	22	6	7	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	3.01	O. R. Hatcher.
Marion	Fostoria, 1,200 ft.	35 10	8 50	50	70	57	59	80	n.	br.	20	21	Charles Foster.
Maury	Hardison's Mills	36 00	10 00	63	75	64	67	86	n.	br.	6	14	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	3.14	Calvin Hardison.
McMinn	Chuckaluck	35 30	7 30	50	73	59	61	84	n.	br.	27	19	5	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	2.48	John Zeigler.
McNairy	McNairy Station	35 00	12 00	66	74	65	68	80	n. w.	br.	21	20	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4.05	J. H. Blakely.
Montgomery	Sailor's Rest	36 24	10 35	.....	.....	.....	.....	.....	sw.	.....	.....	19	3	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	3.00	John Minor.
Overton	Livingston	36 23	8 17	60	71	59	63	84	sw.	br.	14	8	15	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	5.02	J. Laughlin.
Polk	Benton, 880 ft.	35 10	7 45	60	75	65	66	90	n.	br.	15	11	6	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	1.93	Jim Hood.
Rutherford	Murfreesboro'	35 40	9 25	63	78	63	68	92	n. w.	h.	21	1	10	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	5.00	A. Robertson.
Rutherford	Florence Station	35 53	9 26	61	77	64	67	89	n.	br.	14	14	11	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	3.41	C. F. Vandeford.
Rhea	Grand View, 1,635 ft.	35 45	7 48	59	71	60	62	83	n.	br. 4	20	10	2	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	Hattie R. Stratton.
Smith	Riddletown	36 19	8 07	60	75	68	68	86	sw.	h.	21	11	2	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	S. P. Fergusson.
Smith	Alexandria	35 30	8 56	64	66	65	65	80	n. w.	br.	18	5	2	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	5.19	Ireneus Beckwith.
Tipton	Covington	35 20	12 38	59	74	65	66	85	n.	br.	15	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	5.34	T. W. Roane.
Williamson	Franklin	35 50	9 48	60	74	61	65	84	sw.	h.	20	8	11	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5.12	Samuel Henderson.
Warren	McMinnville	35 45	8 45	65	70	66	67	80	n.	br.	26	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	0.81	B. W. Sparks.

Mr. A. J. McWhirter, Commissioner of Agriculture, Statistics, and Mines, for Tennessee, in his report for May, 1883, refers to the Weather Service of that state as follows:

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This important branch of the bureau is gradually assuming shape, and will soon prove a valuable part of these monthly reports.

The accompanying report is compiled from observations made at forty-four different stations. The apparent discrepancies in some of those near together are due in a great measure to the difference in the recording instruments. It is to be regretted that some of the observers have not yet been supplied with the proper instruments for accurate observations, but those deficiencies will be supplied as early as possible.

The feature of the weather for the month was the low temperature over the state about the 22d, with snow in some localities, and frost generally.

In some of the reports breaks have appeared in the observations, and it is

suggested, that in order to prevent this, and have a complete report for the month, the observers instruct some member of their respective families, or some other suitable person, in the use of the instruments, so that in case of absence or sickness, such breaks may be avoided as far as possible.

ERRATUM.

In the April REVIEW, on page 1, the first three lines under barometric "departures from the normal values for the month," should read as follows:—"On the middle Pacific coast, in New England, the middle Atlantic states, and in the eastern part of the lower lake region, the pressure is *above* the normal," instead of *below* the normal as published. This error was detected and correction made before all copies of the REVIEW were printed, and this note will, therefore, apply only to a part of that issue.